

# GIS REGISTRY INFORMATION

SITE NAME:	Hilldale Shell Station			FID # (if appropriate):
BRRTS #:	03-13-002209			
COMMERCE # (if appropriate):	53705-2138-01			
CLOSURE DATE:	December 22, 2003			
STREET ADDRESS:	3401 University Avenue			
CITY:	Madison			
SOURCE PROPERTY GPS COORDINATES (meters in WTM91 projection):		X = 565111	Y = 289306	
CONTAMINATED MEDIA:		Groundwater	<input checked="" type="checkbox"/> Soil	Both
OFF-SOURCE GW CONTAMINATION >ES:		Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <li>• IF YES, STREET ADDRESS:</li> </ul>				
<ul style="list-style-type: none"> <li>• GPS COORDINATES (meters in WTM91 projection):</li> </ul>		X =	Y =	
OFF-SOURCE SOIL CONTAMINATION >Generic or Site-Specific RCL (SSRCL):		Yes	<input type="checkbox"/>	No <input checked="" type="checkbox"/>
<ul style="list-style-type: none"> <li>• IF YES, STREET ADDRESS 1:</li> </ul>				
<ul style="list-style-type: none"> <li>• GPS COORDINATES (meters in WTM91 projection):</li> </ul>		X =	Y =	
CONTAMINATION IN RIGHT OF WAY:		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
<b>DOCUMENTS NEEDED</b>				
Closure Letter, and any conditional closure letter issued <input checked="" type="checkbox"/>				
Copy of most recent deed, including legal description, for all affected properties <input checked="" type="checkbox"/>				
Certified survey map or relevant portion of the recorded plat map ( <i>if referenced in the legal description</i> ) for all affected properties <input checked="" type="checkbox"/>				
County Parcel ID number, <i>if used for county</i> , for all affected properties <input checked="" type="checkbox"/>				
Location Map which outlines all properties within contaminated site boundaries on USGS topographic map or plat map in sufficient detail to permit the parcels to be located easily (8.5x14" if paper copy). If groundwater standards are exceeded, the map must also include the location of all municipal and potable wells within 1200' of the site. <input checked="" type="checkbox"/>				
Detailed Site Map(s) for all affected properties, showing buildings, roads, property boundaries, contaminant sources, utility lines, monitoring wells and potable wells. (8.5x14", if paper copy) This map shall also show the location of all contaminated public streets, highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding ch. NR 140 ESs and soil contamination exceeding ch. NR 720 generic or SSRCLs. <input checked="" type="checkbox"/>				
Tables of Latest Groundwater Analytical Results (no shading or cross-hatching) <input checked="" type="checkbox"/>				
Tables of Latest Soil Analytical Results (no shading or cross-hatching) <input checked="" type="checkbox"/>				
Isoconcentration map(s), <i>if required for site investigation (SI)</i> (8.5x14" if paper copy). The isoconcentration map should have flow direction and extent of groundwater contamination defined. If not available, include the latest extent of contaminant plume map. <input checked="" type="checkbox"/>				
GW: Table of water level elevations, with sampling dates, and free product noted if present <input checked="" type="checkbox"/>				
GW: Latest groundwater flow direction/monitoring well location map (should be 2 maps if maximum variation in flow direction is greater than 20 degrees) <input checked="" type="checkbox"/>				
SOIL: Latest horizontal extent of contamination exceeding generic or SSRCLs, with one contour				NA-Not Applicable <input checked="" type="checkbox"/>
Geologic cross-sections, <i>if required for SI</i> . (8.5x14' if paper copy) <input checked="" type="checkbox"/>				
RP certified statement that legal descriptions are complete and accurate <input checked="" type="checkbox"/>				
Copies of off-source notification letters (if applicable) <input checked="" type="checkbox"/>				
Letter informing ROW owner of residual contamination (if applicable)(public, highway or railroad ROW) <input checked="" type="checkbox"/>				
Copy of (soil or land use) deed restriction(s) or deed notice <i>if any required as a condition of closure</i> <input checked="" type="checkbox"/>				



ENVIRONMENTAL & REGULATORY SERVICES DIVISION  
BUREAU OF PECFA  
P.O. Box 8044  
Madison, Wisconsin 53708-8044  
TDD #: (608) 264-8777  
Fax #: (608) 267-1381  
<http://www.commerce.state.wi.us>  
<http://www.wisconsin.gov>  
Jim Doyle, Governor  
Cory L. Nettles, Secretary

December 22, 2003

William Schmied  
721 Prairie Smoke Road  
Madison, WI 53717-2709

RE: **Final Closure**

**Commerce # 53705-2138-01** WDNR BRRTS # 03-13-002209  
Hilldale Shell Station, 3401 University Avenue, Madison

Dear Mr. Schmied:

The Wisconsin Department of Commerce (Commerce) has received all items required as conditions for closure of the site referenced above. This case is now listed as "closed" on the Commerce database and will be included on the Wisconsin Department of Natural Resources (WDNR) Geographic Information System (GIS) Registry of Closed Remediation Sites to address residual contamination. It is in your best interest to keep all documentation related to the environmental activities that were conducted.

If residual contamination is encountered in the future, it must be managed in accordance with all applicable state and federal regulations. If it is determined that any remaining contamination poses a threat, the case may be reopened and further investigation or remediation may be required.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (608) 261-6543.

Sincerely,

A handwritten signature in black ink, appearing to read "Ralph N. Smith".

Ralph N. Smith  
Hydrogeologist  
Site Review Section

cc: Tim Ryan -- BT<sup>2</sup>, Inc.  
Case File



May 14, 2002

Mr. William Schmied  
721 Prairie Smoke Rd  
Madison, WI 53717-2709

RE: **Conditional Case Closure**

**Commerce # 53705-2138-01** WDNR BRRTS # 03-13-002209  
Hilldale Shell Station, 3401 University Ave, Madison

Removal of 2-10,000 gallon gasoline, 1- 8,000 gallon gasoline and 1-500 gallon waste oil underground storage tanks (USTs) and associated fuel delivery system.

Dear Mr. Schmied:

On May 6, 2002, the Wisconsin Department of Commerce (Commerce) PECFA Site Review Section received a request for case closure, dated May 2, 2002 from BT<sup>2</sup>, Inc. On May 6, 2002, Commerce received verification that the GIS Registry fee was paid to the Wisconsin Department of Natural Resources to address residual groundwater contamination. It is understood that residual groundwater contamination remains on-site. Using the standards established in the NR 700 series, Wisconsin Administrative Code (Wis. Adm. Code), Commerce has determined that this site does not pose a significant threat to the environment and human health. No further investigation or remedial action is necessary.

Groundwater remains impacted above NR 140 enforcement standards established for groundwater in Wis. Adm. Code. Monitoring wells MW2, MW4, MW5A, MW7BT, and MW8 have concentrations above enforcement standards at this site. Benzene (1200) ug/L, ethylbenzene, and Methyl-tertiary-butyl-ether (MtBE) (560) ug/L as found in monitoring well MW4 on 11/15/01 are above NR 140 enforcement standards. It is necessary for this site to be listed on the WDNR's GIS Registry for Closed Remediation sites to address groundwater on site.

Groundwater contamination extends into the road right-of-way (ROW) on University Avenue. A copy of the letter notification to the City of Madison informing the ROW owner that soil and groundwater is impacted above NR 726, Wis. Adm. Code standards has been received by Commerce for this site.

**The following condition must be satisfied to obtain final closure:**

- Provide abandonment documentation for all the monitoring wells and remedial system components.

As of August 31, 2001, State Statute 101.143 requires PECFA claimants seeking reimbursement of interest costs to submit a final reimbursement claim within 120 days after they receive written notification that no further action is required with respect to the discharge at their site. This letter serves as your written notice of "no further action". If your claim is not received

within 120 days of the date of this letter, interest costs incurred after 60 days of the date of this letter will not be eligible for PECFA reimbursement. Costs associated with recording deed notices or other restrictions are not eligible for PECFA reimbursement, and the recording of these notices should not delay the claim submittal process.

Thank you for your efforts to protect Wisconsin's environment. If you have any questions, please contact me in writing at the letterhead address or by telephone at (608) 261-6543.

Sincerely,



Ralph N. Smith  
Hydrogeologist  
Site Review Section

cc: Tim Ryan – BT<sup>2</sup>, INC  
Case File

**2236044**

STATE OF WISCONSIN

COUNTY OF DANE

CITY OF MADISON

PP. 15114 PAGE 59

In the matter of the resolution of  
the Common Council of the City of  
Madison for the vacating of part  
of the Blackhawk Avenue right-of-way  
at University Avenue

LIS PENDENS .

TO WHOM IT MAY CONCERN:

Notice is hereby given that a resolution will be introduced to the Common Council of the City of Madison for the purpose of vacating part of the Blackhawk Avenue right-of-way, located in the Northeast 1/4 of Section 20, Town 7 North, Range 9 East, City of Madison, Dane County, Wisconsin, more fully described as follows:

Beginning at the Southwest corner of Lot 6, Block 6, University Park, a recorded plat in said Northeast 1/4; thence North 89°18'06" West 60.56 feet; thence North 21°05'54" West 22.77 feet; thence North 17°07'14" West 24.80 feet to a point of curve; thence on a curve to the right, convex to the Southwest, having a radius of 176.00 feet and a long chord that bears North 08°09'16" West 54.86 feet to a point of compound curve; thence on a curve to the right, convex to the Northwest, having a radius of 20.00 feet and a long chord that bears North 45°43'21" East 28.24 feet to a point of tangency; thence South 89°21'42" East 63.12 feet to a point on the West line of said Lot 5 and Point "A"; thence South 00°12'20" East 119.00 feet on said West line to the Southwest corner of said Lot 6 and the point of beginning.

A public utility easement including public storm sewer, public sanitary sewer and public water main easements shall be retained over the following described portion of the above described vacation:

Commencing at the said Point "A"; thence North 89°21'42" West 4.00 feet to the point of beginning; thence South 00°12'20" East 119.00 feet; thence North 89°18'06" West 56.56 feet; thence North 21°05'54" West 22.77 feet; thence North 17°07'14" West 24.80 feet to a point of curve; thence on a curve to the right, convex to the Southwest, having a radius of 176.00 feet and a long chord that bears North 08°09'16" West 54.86 feet to a point of compound curve; thence on a curve to the right, convex to the Northwest, having a radius of 20.00 feet and a long chord that bears North 45°43'21" East 28.24 feet to a point of tangency; thence South 89°21'42" East 59.12 feet to the point of beginning.

Notice is further given that a correct drawing of said street right-of-way to be vacated is attached hereto.

Dated this 29<sup>th</sup> day of November, 1990.

City of Madison

By: Larry D. Nelson  
Larry D. Nelson, City Engineer

LDN:RMC:jck

NOTE: This document replaces document #2234667.

10

THIS IS A DEED dated AUGUST 30, 1983, by SHELL OIL COMPANY, a Delaware corporation with offices at 1415 West 22nd Street, Oak Brook, Illinois 60521 (herein called "Grantor"), to WILLIAM D. SCHMIED and ANNE E. SCHMIED, his wife, \*of 2101 Prairie Road in Madison, Wisconsin (herein called "Grantee", whether one or more): \*to each an undivided one-half interest as tenants-in-common.

GRANTOR, for good and valuable consideration received, hereby grants and conveys to Grantee the following described Premises situated in Madison, County of Dane and State of Wisconsin:

Lot Six (6) and part of Lots One (1), Two (2), Three (3), Four (4), Five (5) and Nineteen (19), Block 6, University Park, City of Madison, Dane County, Wisconsin; described as follows: Commencing at the Northeast corner of Section 20, Town 7 North, Range 9 East, City of Madison, Dane County, Wisconsin; thence North 89 degrees 21' 43" West, 469.87 feet; thence South 00 degrees 23' 13" East, 76.01 feet to the point of beginning; thence continuing South 00 degrees 23' 13" East, 10.15 feet to a point on a curve; thence Southeasterly on a curve to the left which has a radius of 47.0 feet and a chord which bears South 08 degrees 17' 10" East, 68.77 feet to a point of reverse curve; thence Southeasterly on a curve to the right which has a radius of 40.0 feet and a chord which bears South 27 degrees 50' 48" East, 36.89 feet to a point of tangency; thence South 00 degrees 23' 13" East, 6.47 feet; thence North 89 degrees 21' 43" West, 224.25 feet; thence North 00 degrees 23' 13" West, 117.0 feet; thence South 89 degrees 21' 43" East, 197.78 feet to the point of beginning;

together with all rights, privileges and appurtenances thereto and all buildings and land improvements thereon; but subject to all easements, rights-of-way, reservations, restrictions and encumbrances of record, to any existing tenancies, to all zoning laws and ordinances, and to any state of facts an accurate survey or inspection of the premises would show.

TO HAVE AND TO HOLD the same unto Grantee and Grantee's heirs, successors and assigns forever.

SUBJECT to the foregoing and to the liens of all taxes and assessments for the year 1983 and subsequent years, Grantor covenants with Grantee that Grantor will warrant and defend the title to the premises against the lawful claims of all persons claiming by, through or under Grantor.

EXECUTED by Grantor as of the date first herein specified.

WITNESSES:

I. V. Harvey  
I. V. HARVEY

D. M. Stonaker  
D. M. STONAKER

SHELL OIL COMPANY

By

R. C. Winterhoff

Attest

Kimberly Clifford

ASSISTANT SECRETARY

TRANSFER

\$ 642 " w

STATE OF TEXAS )  
COUNTY OF HARRIS )  
                    ) SS: FEE PAID

The foregoing instrument was acknowledged before me this 30th day of AUGUST, 1983, by T.L. Clements, Mac George Real Estate of Shell Oil Company, a Delaware corporation, on behalf of the corporation.

R. C. Winterhoff  
Notary Public  
R. C. WINTERHOFF

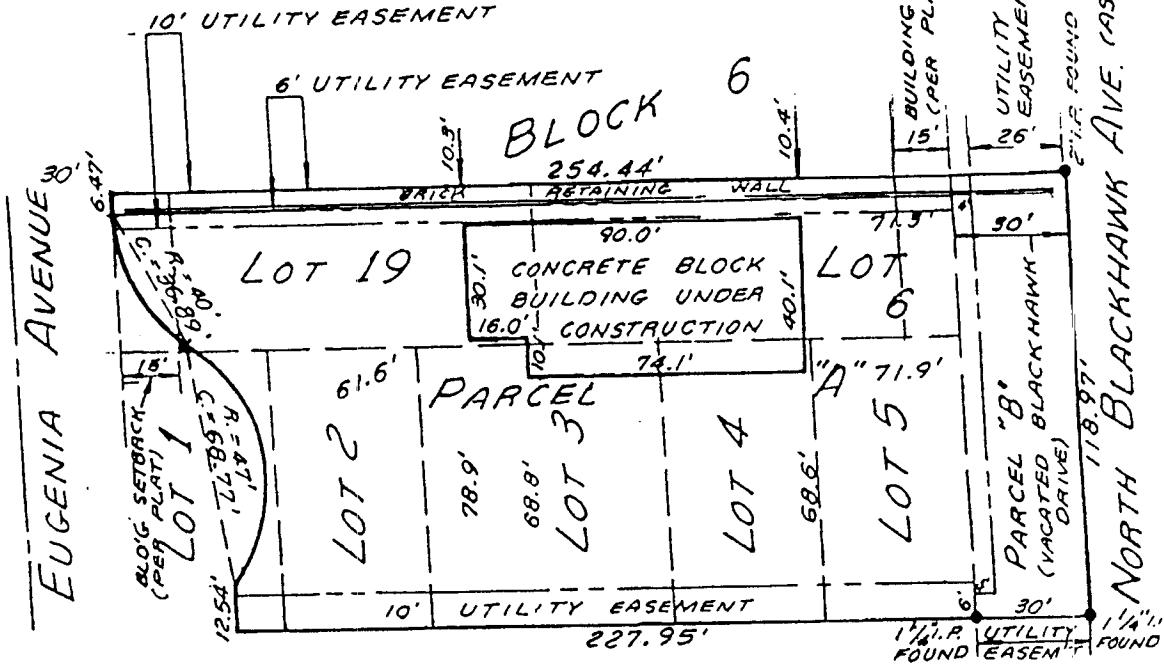
Notary Public in and for the State of Texas  
My Commission Expires August 11, 1984

My commission expires: 8-11-84

## MORTGAGE INSPECTION

R.F. Sarko and Associates, Inc.  
Land Surveyors  
2919 University Avenue  
Madison, Wisconsin 53705

COPY



UNIVERSITY AVENUE  
REFERENCE LINE (EASTBOUND)

SCALE: 1" = 40'  
114.1'



*Joe Leland Sarko  
10-3-94*

Map Number: 4-27575  
Job Number: 36164  
Page One of Three

MORTGAGE INSPECTION

R.F. Sarko and Associates, Inc.  
Land Surveyors  
2919 University Avenue  
Madison, Wisconsin 53705

LEGAL DESCRIPTION OF PROPERTY INSPECTED:

PARCEL A: Lot 6, and part of Lots 1, 2, 3, 4, 5, and 19, Block 6, University Park, City of Madison, Dane County, Wisconsin, being more particularly described as follows: Commencing at the Northeast corner of Section 20, T7N, R9E, City of Madison, Dane County, Wisconsin; thence N 89°21'43" W, 469.87 feet; thence S 00°23'13" E, 76.01 feet to the point of beginning; thence continuing S 00°23'13" E, 10.15 feet to a point on a curve; thence Southeasterly on a curve to the left which has a radius of 47.0 feet and a chord which bears S 08°17'10" E, 68.77 feet to a point of reverse curve; thence Southeasterly on a curve to the right which has a radius of 40.0 feet and a chord which bears S 27°50'48" E, 36.89 feet to a point of tangency; thence S 00°23'13" E, 6.47 feet; thence N 89°21'43" W, 224.25 feet; thence N 00°23'13" W, 117.0 feet; thence S 89°21'43" E, 197.78 feet to the point of beginning.

PARCEL B: Part of vacated Blackhawk Avenue, located in the NE 1/4 of Section 20, T7N, R9E, City of Madison, Dane County, Wisconsin, being more particularly described as follows: Beginning at the Southwest corner of Lot 6, Block 6, University Park, a recorded plat in said NE 1/4; thence N 89°18'06" W, 30.00 feet to the centerline of Blackhawk Avenue as originally platted; thence N 00°12'20" W, 118.97 feet on said centerline to the South right-of-way line of University Avenue; thence S 89°21'42" E, 30.00 feet on said South right-of-way line to a point on the West property line of said Lot 5, said Block 6; thence S 00°12'20" E, 119.00 feet on the West line of said Lots 5 and 6 to the point of beginning.

ADDRESS OF PROPERTY INSPECTED:

3401 University Avenue  
Madison, Wisconsin

INSPECTED FOR:

Gil-Her, LTD.  
3469 Capital Drive  
Sun Prairie, WI 53590

Attn: Tad



CERTIFICATE:

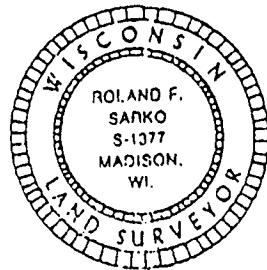
"I, Roland F. Sarko, Registered Land Surveyor in the State of Wisconsin, do hereby certify that I have inspected the above described property and that I have mapped the property according to the official records and that I have mapped the locations of all visible structures, the dimensions of all principal buildings, roadways, apparent easements and visible encroachments, if any. This mortgage inspection has been prepared in accordance with the requirements of Gil-Her, LTD. and under an agreement between R.F. Sarko and Associates, Inc. and Gil-Her, LTD. which excludes this mortgage inspection from all of the requirements of Section AE 7, per Section AE 7.01 (2), Wisconsin Administration Code, except Section AE 7.08, and therefore, this mortgage inspection does not comply with all of the requirements of Section AE 7. This mortgage inspection is made for the exclusive use of the present owners of the property and also those who purchase, mortgage or guarantee the title thereto within one year from date hereof and as to them we certify the accuracy of said mortgage inspection as shown."

Map Number: 4-27575  
Job Number: 36164  
Page Two of Three

Dated this 3rd day of October, 1994.

*Roland F. Sarko*

Roland F. Sarko  
Wisconsin Registered Land Surveyor  
Number S-1377



Map Number: 4-27575  
Job Number: 36164  
Page Three of Three

**Map Legend**

Closed Remediation Sites:

contaminated groundwater



contaminated soil



groundwater, soil contaminated



Offsource, contaminated properties



Counties



Interstate/US/State Highways



River/Streams/Openwater



Cities, Towns, Villages



Center / Pan / ▲ WTM91 coordinates

Zoom\_In [The Most]

[The Most]

Zoom\_Out [1.5x]

[1.5x]

Identify [By Point Location]

[By Point Location]

Or select a

[DANE]

county

Or select

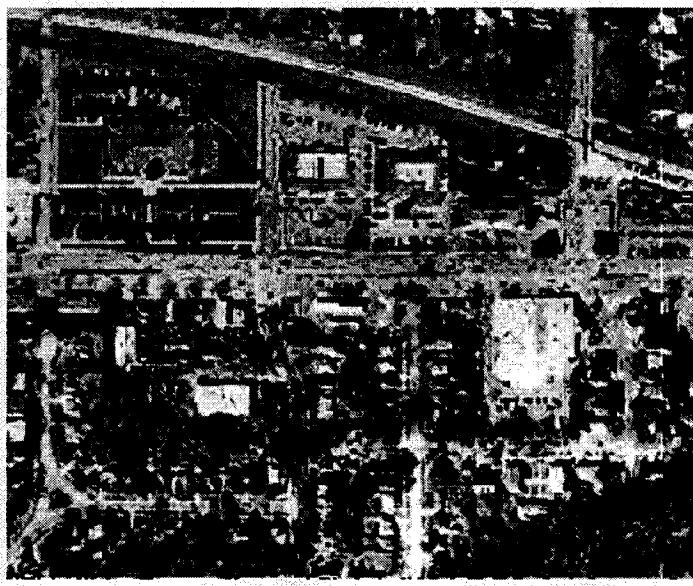
city/town/

village

Enter a

[county or a]

[city / village name to find:]



Scale 1 : 3,459

Please read the documentation for more information.

▲ WTM coordinates: 565111, 289306



**Table 2**  
**Groundwater Analytical Results Summary**  
**Hilldale Shell / Project #718**  
 (Results are in  $\mu\text{g/l}$ )

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW1A	5/10/96	--	<50	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	N/A
	4/9/97	--	<30	<0.20	<0.20	<0.20	<0.5	<0.40	<0.30	<0.30	N/A
	9/30/97	--	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	0.77	N/A
	1/30/98	(1)	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	0.50	N/A
	6/16/98	(1)	<50	<0.26	<0.24	<0.21	<1.34	<0.86	<0.54	0.29	N/A
	9/16/98	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	1/20/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	0.31	N/A
	8/31/99	--	<50	0.40	<0.22	0.20	0.35	<0.22	<0.29	<0.16	N/A
	11/10/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
MW2	2/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	5/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	12/5/00	--	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	<0.40	N/A
	4/5/01	(2)	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	0.80	N/A
	4/9/97	--	180	19	<0.20	13	4.7	<0.40	<0.30	19	N/A
MW2	9/30/97	(3)	700	130	<0.29	56	13.4	<0.30	0.71	38	N/A
	1/30/98	(4)	210	29	<0.29	6.2	3.2	<0.30	<0.34	3.7	N/A
	1/30/98	(4)	270	41	<0.29	8.8	4.4	<0.30	<0.34	5.1	N/A
	6/16/98	(3)	780	300	<0.60	36	25.3	<2.1	<1.4	70	N/A
Dup	6/16/98	(3)	770	290	<0.60	36	24.0	<2.1	<1.4	74	N/A

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW2 (cont.)											
9/16/98	(5)		170	12	<0.22	0.54	1.7	0.28	<0.29	<1.9	NA
9/19/98	(5)	Dup	100	10	<0.22	0.42	1.0	<0.22	<0.29	<1.5	NA
1/21/99	-		160	3.3	<0.22	0.28	0.79	<0.22	<0.29	7.0	NA
5/3/99	(6),(7)	Dup	75	1	<0.22	<0.20	<0.23	<0.22	<0.29	<0.20	NA
5/3/99	(6),(7)	Dup	91	1.2	<0.22	<0.20	<0.23	<0.22	<0.29	<0.24	NA
8/31/99	-		570	110	<1.1	120	30	1.2	<1.4	<0.80	NA
11/1/99	(6)		850	190	1.4	100	100	2.3	3.2	<1.7	NA
2/9/00	(6)		440	130	0.76	13	66	5.1	4.8	<33	NA
5/9/00	-		400	120	<0.44	7.2	29	4.6	3.2	81	NA
12/5/00	(8)		1,100	380	<4.0	96	68	7.2	<4.0	64	NA
4/5/01	(12)		380	130	4.8	9.4	23.4	4.6	3.2	23	NA
7/25/01	(9)		190	51	0.95	1.4	6.3	1.8	0.84	<1.0	NA
11/15/01	--		<50	8.9	0.59	<0.20	1.9	2.5	0.54	2.9	NA
MW3	5/10/96	--	<50	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	31	NA
	4/9/97	--	58	<0.20	<0.20	<0.5	<0.40	<0.30	70	NA	
	4/9/97	--	<30	<0.20	<0.20	<0.5	<0.40	<0.30	28	NA	
	Dup										
	6/16/98	--	<50	<0.26	<0.24	<0.21	<1.34	<0.86	<0.54	58	NA
	9/16/98	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	17	NA
	1/20/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	2.2	NA
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	0.74	NA
	8/31/99	--	<50	<0.13	<0.22	<0.20	0.23	<0.22	<0.29	8.8	NA

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW3 (cont.)	1/10/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA
	2/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA
	5/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	0.58	NA
	12/5/00	--	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	2.6	NA
	4/5/01	--	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	15	NA
	5/10/96	--	60,000	2,800	3,300	12,000	16,100	4,600	1,300	690	NA
MW4	5/10/96	--	60,000	3,100	3,100	12,000	15,800	3,800	1,100	670	NA
	Dup										NA
	4/9/97	--	40,000	3,000	1,400	2,000	7,900	3,200	980	1,500	NA
	9/30/97	(10)	15,000	58	370	180	1,800	2,000	670	390	NA
	1/30/98	(3)	6,000	37	55	33	234	450	300	98	NA
	6/16/98	(6)	40,000	1,300	1,800	5,100	9,300	3,000	990	170	NA
9/16/98	9/16/98	(11)	28,000	950	1,300	5,200	7,000	1,600	390	350	NA
	1/21/99	(11)	22,000	3,100	1,100	1,700	5,600	1,600	490	1,500	NA
	5/3/99	(11)	4,800	100	140	9	260	480	170	190	NA
	8/31/99	(11)	3,000	19	11	5.2	28	140	87	<3.2	NA
	8/31/99	(11)	3,800	23	14	<4.0	39	170	110	<3.2	NA
	Dup										NA
11/10/99	11/10/99	(12)	3,400	290	41	21	37	34	30	130	NA
	11/10/99	(12)	9,900	300	43	20	36	40	34	130	NA
	Dup										NA
	2/9/00	(12)	9,900	310	58	47	120	56	61	390	NA
Dup	2/9/00	(12)	11,000	310	57	47	120	61	64	410	N/A

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethybenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW4 (cont.)											
5/9/00	(12)	6,300	890	100	100	180	85	58	58	560	N/A
5/9/00	(12)	6,300	910	110	95	170	80	54	520		N/A
Dup											
12/5/00	(13)	34,000	5,700	2,100	3,300	8,300	1,300	340	830		N/A
Dup											
12/5/00	(13)	35,000	5,900	2,200	3,300	8,600	1,400	350	950		N/A
Dup											
4/5/01	(13)	27,000	5,700	1,900	3,000	7,700	1,300	410	1,200		N/A
7/25/01	(12)	13,000	2,100	1,100	700	2,900	980	280	600		N/A
7/25/01	(12)	13,000	2,100	1,000	690	2,800	960	270	590		N/A
Dup											
11/15/01	(12)	6,100	1,200	480	93	920	430	130	560		N/A
MW5											
7/25/01	(14)	1,600	370	<0.22	<0.20	1.8	<0.22	<0.29	22		N/A
11/15/01	--	1,100	430	<0.22	<0.20	1.6	<0.22	<0.29	170		N/A
MW5A											
5/10/96	--	<50	4.0	<1.0	1.7	<2.0	<1.0	<1.0	<1.0		N/A
4/9/97	--	130	36	<0.20	24	2.9	<0.40	<0.30	1.7		N/A
9/30/97	(3)	310	58	<0.29	28	12.1	<0.30	<0.34	51		N/A
9/30/97	(3)	150	27	<0.29	13	6.2	<0.30	<0.34	45		N/A
Dup											
1/3/98	(4)	3,500	160	<2.9	28	25	<3.0	<3.4	1,100		N/A
6/16/98	(3)	1,200	310	<1.2	87	42	<4.3	<2.7	990		N/A
9/16/98	(5)	640	79	<0.22	25	14	0.25	0.64	<17		N/A
1/21/99	--	640	93	<0.22	7.9	6.6	0.36	<0.29	66		N/A
Dup											
5/3/99	(6)(7)	730	45	<0.22	5	3.7	<0.22	<0.29	<2.2		N/A

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW5A (cont.)	8/31/99	--	1,200	430	<0.22	7.7	13	0.63	0.52	580	N/A
	11/10/99	--	1,200	250	<1.1	6.7	10	<1.1	<1.4	720	N/A
	2/9/00	(6)	810	250	<1.1	2.5	11	<1.1	<1.4	<44	N/A
	5/9/00	--	660	170	<1.1	2.2	7.2	<1.1	<1.4	140	N/A
	12/5/00	(15)	700	210	<4.0	<4.0	<1.1	<4.0	<4.0	260	N/A
	4/5/01	(16)	570	210	<0.40	<0.40	2.23	<0.40	<0.40	100	N/A
MW6	5/10/96	--	<50	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	N/A
	9/16/98	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	N/A
MW7	5/9/00	--	580	11	24	1.6	5.9	2.9	4.2	16	N/A
MW7BT	5/22/97	--	NA	460	800	2,200	4,300	600	270	<10	n-Butylbenzene n-Propylbenzene Isopropylether Isopropylbenzene
	9/30/97	(8)	700	17	39	83	236	28	13	2.6	NA
	1/30/98	(3)	1,300	14	110	70	360	71	29	3.6	NA
	6/16/98	(6)	2,600	7.4	140	24	800	210	74	7.8	NA
	9/16/98	(5), (10)	230	1.4	11	5.2	58	18	5.2	<1.0	NA
	1/20/99	(10)	3,000	16	100	10	210	160	61	27	NA
	5/3/99	(10)	280	0.65	21	4.3	41	28	8.6	3.7	NA
	8/31/99	--	<50	0.17	<0.22	0.26	0.81	0.51	<0.29	<0.16	NA
	11/10/99	(17)	710	9.0	22	1.8	>29	15	27	>2.4	N/A
	2/9/00	(18)	2,600	43	240	9.7	160	130	120	>3.9	NA

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
MW7BT (cont.)	12/5/00	(19)	420	33	<4.0	<4.0	<1.1	<4.0	12	150	NA
	4/5/01	(13)	61	2.9	4.1	<0.40	2.5	1.9	3.7	3.7	NA
	7/25/01	(12)	320	8.8	9.3	0.88	5.1	17	18	8.5	NA
	11/15/01	(12)	480	2.4	11	0.29	0.97	0.60	9.9	65	NA
MW8	5/10/96	-	100	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	130	NA
	4/9/97	-	880	1.9	0.5	0.5	0.4	0.5	0.4	600	NA
	9/16/98	(5)	330	37	<0.22	0.24	0.93	<0.22	<0.29	<61	NA
	5/3/99	(10)	600	150	0.39	1.5	2.5	17	0.35	35	NA
MW9	8/31/99	-	180	19	<0.22	<0.20	0.64	<0.22	<0.29	7.8	NA
	11/10/99	(6)	520	50	<0.22	0.39	2.3	<0.22	<0.29	<3.3	NA
	2/9/00	(18)	430	28	0.29	0.21	1.2	14	<0.29	<3.8	NA
	5/9/00	-	500	100	7.5	0.28	1.5	<0.22	<0.29	31	NA
MW9	12/5/00	(15)	610	23	19	<2.0	<5.5	<2.0	<2.0	51	NA
	4/5/01	(20)	540	13	11	0.50	<1.1	<0.40	<0.40	130	NA
	7/25/01	-	240	0.78	<0.22	<0.20	<0.23	<0.22	<0.29	34	NA
	11/15/01	-	170	0.17	<0.22	<0.20	<0.23	<0.22	<0.29	43	NA
MW9	5/22/97	-	NA	<0.2	<0.2	<0.2	<0.6	<0.7	<0.4	<0.2	NA
	9/30/97	-	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA
	1/30/98	-	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA
	6/16/98	-	<50	<0.26	<0.24	<0.21	<1.34	<0.86	<0.54	<0.22	NA
MW9	9/16/98	-	<50	0.46	<0.22	0.23	0.52	<0.22	<0.29	<0.16	NA
	1/20/99	-	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
PZ7 (cont.)	7/25/01	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA
	11/15/01	(6)	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.19	NA
Effluent	9/16/98										
	1/26/99	(5)	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<1.8	NA
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	1.5	NA
	8/31/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	2.4	Naphthalene <1.1
	11/10/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	4.0	Naphthalene <1.1
Influent	9/16/98	--	130	15	2.1	0.65	12	1.2	0.60	120	NA
	5/3/99	(10)	390	120	28	4.2	35	9.6	2	120	NA
Midcarb	9/16/98	--	NA	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	1.1	NA
	1/26/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	0.89	NA
	5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	1.1	NA
EXT1	9/30/97	(23)	280	19	<0.29	2.0	38	1.1	10	180	NA
	6/16/98	(23)	1,600	250	42	140	290	65	30	150	NA
	1/26/99	--	110	20	2.8	0.33	0.79	0.48	<0.29	200	NA
	8/31/99	--	81	3.4	1.1	0.36	3.0	1.6	0.30	71	NA
	1/10/99	--	63	6.3	0.61	0.31	0.57	0.27	<0.29	100	NA
	6/19/01	--	NA	100	28	2.6	40	12	<2.9	130	NA
	11/15/01	(12)	1,400	540	150	2.1	73	49	0.55	260	NA
Dup	1/15/01	(12)	1,400	600	150	2.2	75	50	0.60	250	NA

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
Rinsate Blank											
5/10/96	--	<50	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	NA
9/30/97	(21)	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA	
1/30/98	--	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA	
1/21/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
8/31/99	(24)	<50	<0.13	<0.22	0.26	0.54	0.68	<0.29	<0.16	NA	
11/10/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
2/9/00	--	<50	<0.13	<0.22	0.25	<0.23	<0.22	<0.29	<0.16	NA	
5/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
Trip Blank											
5/10/96	--	<50	<0.6	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	NA	
4/9/97	--	<30	<0.20	<0.20	<0.20	<0.50	<0.40	<0.30	<0.30	NA	
5/22/97	--	NA	<0.2	<0.2	<0.2	<0.6	<0.7	<0.4	<0.2	NA	
9/30/97	(12)	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA	
1/30/98	--	<50	<0.16	<0.29	<0.36	<1.15	<0.30	<0.34	<0.20	NA	
6/16/98	--	<50	<0.26	<0.24	<0.21	<1.34	<0.86	<0.54	<0.22	NA	
10/16/98	--	--	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
1/21/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
5/3/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
8/31/99	(24)	<50	<0.13	<0.22	<0.20	0.27	<0.22	<0.29	<0.16	NA	
11/10/99	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
2/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	
5/9/00	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA	

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

Sample	Date	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	Other VOCs
Trip Blank (cont.)	12/5/00	--	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	<0.40	NA
	4/5/01	--	<14	<0.40	<0.40	<0.40	<1.1	<0.40	<0.40	<0.40	NA
	7/25/01	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA
	11/15/01	--	<50	<0.13	<0.22	<0.20	<0.23	<0.22	<0.29	<0.16	NA
NR 140 Enforcement Standards		NE	5	700	343	620	NE	NE	60	Naphthalene	40
NR 140 Preventive Action Limits		NE	0.5	140	68.6	124	NE	NE	12	Naphthalene	8

**ABBREVIATIONS:**

GRO = Gasoline Range Organics

NA = Not Analyzed

TMB = Trimethylbenzene

ND = Not Detected

MTBE = Methyl-tert-butyl ether

NE = No Standard Established

VOCs = Volatile Organic Compounds

**NOTE:**  
\* = Diisopropyl ether

**Table 2 (Continued)**  
**Groundwater Analytical Results Summary**

**LABORATORY NOTES:**

- (1) MTBE has an estimated value, detected at a concentration below LOQ.
- (2) MTBE Analysis - Value is in between LOD and LOQ.
- (3) Value reported due to early peaks in window.
- (4) GRO Analysis - Sample exhibits hydrocarbon pattern resembling gasoline. Early peaks were present outside of window. M&p-Xylene has an estimated value, detected at a concentration below LOQ.
- (5) Matrix interference.
- (6) MTBE - Matrix interference.
- (7) GRO - Unidentified compound present.
- (8) GRO Analysis - Significant peaks were detected outside the chromatographic window. PVOCS Analysis - Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference. 1,2,4-TMB and o-xylene Analyses - Values are in between LOD and LOQ.
- (9) MBTE Analysis - Matrix interference, GRO Analysis - Does not match typical pattern.
- (10) Sample exhibits hydrocarbon pattern resembling gasoline. Early and late peaks were present outside of window.
- (11) Late eluting hydrocarbons present.
- (12) GRO Analysis - Late eluting hydrocarbons present.
- (13) GRO Analysis - Significant peaks were detected outside the chromatographic window.
- (14) GRO Analysis - Does not match typical pattern.
- (15) GRO Analysis - Significant peaks were detected outside the chromatographic window. PVOCS Analysis - Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
- (16) GRO Analysis - Significant peaks were detected outside the chromatographic window. Xylene Analysis - Value is in between LOD and LOQ.
- (17) MTBE and Xylenes - Matrix interference. GRO Analysis - Late eluting hydrocarbons present.
- (18) MTBE - Matrix interference. GRO - Late eluting hydrocarbons present.
- (19) GRO Analysis - Value is in between LOD and LOQ, and significant peaks were detected outside the chromatographic window. Xylene Analysis - Value is in between LOD and LOQ.
- (20) GRO Analysis - Significant peaks were detected outside the chromatographic window. Toluene Analysis - Value is in between LOD and LOQ.
- (21) Standard had a high recovery for Methyl tert-butyl ether at 117.5%. Value reported is below detect.
- (22) Benzene Analysis - Value is in between LOD and LOQ.
- (23) Sample exhibits hydrocarbon pattern resembling gasoline. Early peaks were present outside of window.
- (24) PVOCS - Result confirmed via re-analysis.
- (14) The analytical laboratory provided comments or qualifiers for some of the results shown in the table. See the full laboratory report for additional information.

**Table 3**  
**Groundwater Monitoring Results for Natural Attenuation Evaluation**  
**Hildale Shell / Project #718**

Sample	Date	Dissolved Oxygen (mg/l)	Nitrate + Nitrite Nitrogen (mg/l as N)	Dissolved Iron (mg/l)	Sulfate (mg/l)	Alkalinity (mg/l)	pH (Std. Units)
MW1A	11/10/99	2	0.45	<0.024	60	NA	7.2
MW2	11/10/99	1	20	<0.024	40	NA	6.8
MW3	11/10/99	3	1.4	<0.024	85	NA	7.1
MW4	11/10/99	2	<0.024	7.0	54	NA	6.7
MW5A	11/10/99	3	<0.024	<0.024	72	NA	6.8
MW6	11/10/99	<1	4.1	<0.024	99	NA	6.7
MW7	11/10/99	1	2.4	<0.024	61	NA	6.8
MW7BT	11/10/99	1	<0.024	0.046	99	NA	6.8
MW8	11/10/99	2	<0.024	<0.024	75	NA	6.8
MW9	11/10/99	4	<0.024	<0.024	85	NA	6.9

NOTES:  
Dissolved oxygen (DO) and pH measured in the field. DO measured using chemet colorimetric test kit.

**Table 5**  
**Water Level Elevations and Survey Data**  
**Hillhouse Shallow Project #718**

Well Number		Ground Water Elevation (feet amsl)														
Top of Casing Elevation (feet amsl)	Notes	MW1	MW1A	MW2	MW3	MW4	MW5	MW5A	MW6	MW7	MW7BT	MW8	MW9	P1	PZT	EXT1
Top of Casing Elevation (feet bgs)		22.0-32.0	19.5-29.0	19.0-29.0	18.0-28.0	18.5-28.5	17.0-27.0	17.0-27.0	21.0-31.0	20.0-30.0	20.0-30.0	17.0-27.0	20.0-30.0	15.0-40.0	14.5-0-50.5	20.5-40.5
Measurement Date	(5)															
05/16/94	(5)	77.91		77.64	78.18	77.09										
05/23/94	(5)	78.10		77.68	78.32	77.30										
06/02/94	(5)	77.84		77.53	78.08	77.53	77.31									
07/06/94	(5)	77.55		77.12	77.75	77.03	76.91									
07/13/94	(5)	77.85		77.20	77.94	77.10									77.11	
08/01/94	(5)	77.45		76.95	77.60	76.88	76.75									
04/06/95	(5)	77.71		77.23	77.43		77.04	77.00	77.10						77.10	
05/26/95	(5)	78.02		77.75	78.06	77.26		77.54	77.53	77.62		77.49		77.59		
07/13/95	(5)	77.39		77.02	77.15	76.14		76.81	76.74	76.89		76.77		76.87		
05/10/96	(5)	74.42		73.64	74.61	72.16		73.48	73.46	73.67		73.44		73.53		
04/09/97	(5)	76.57		76.52	77.04	76.47		76.27	76.15	76.23		76.26		76.44		
05/22/97	(5)								77.61					77.62	76.44	
06/06/97	(5)	75.92		76.85	77.41		76.70		78.05					77.90		
09/30/97	(4)	76.74		76.53		76.41		76.33		77.44				77.32		
01/30/98	(4)	76.35		76.03		75.84		75.86		77.01				77.04		
06/16/98	(4)	77.50		78.08	77.51	77.48		76.77		78.20				78.07		
09/16/98	(4)	75.22		74.69	75.01	74.15		74.52	74.43		75.86	74.48		75.57	75.19	
01/20/99	(4)	76.92		76.38	76.97	71.37		76.25		77.60				77.68	77.73	
05/03/99	(4)	77.48		76.82	77.45	76.57		76.64	76.62	76.79		76.57		76.68	78.10	
08/31/99	(4)	76.27		75.53	75.48	75.33		75.27		77.62		75.17		75.80	75.91	
11/10/99	(4)	74.82		74.27	75.19	74.07		74.06	73.54	74.24		75.88		74.16	75.47	
02/09/00	(5)	75.46		74.80	75.77	74.82		74.66		76.39		74.48		76.29	76.24	
05/09/00	(5)	75.37		74.79	75.06	73.83		74.66		75.64		74.46		75.58	75.66	
05/09/00	(5)	76.42		76.27	77.02	76.30		76.12		77.96		76.04		78.73	77.77	
12/05/00	(5)	76.59		76.67	77.19	76.66		76.51		78.20		76.33		77.92	77.87	
04/05/01	(5)	77.92		77.72	77.20		77.05			78.42		76.96		78.25	78.19	
07/25/01	(5)			75.53		75.41			75.16		75.40		74.94		74.66	
11/15/01	(5)			76.04		75.11		76.09		75.00		76.82		76.79		
														76.86		

**Notes:**

(1) Casing elevations prior to re-surfacing at the site.

(2) Casing elevations after re-surfacing at the site.

(3) MW1 and MW5 were abandoned 11/1/94 because of irreparable damage caused during site reconstruction. MW1A and MW5A are the replacement wells for MW1 and MW5, respectively.

(4) Groundwater remediation system operating.

(5) Groundwater remediation system not operating.

Abbreviations:  
amsl = above mean sea level  
bgs = below ground surface

Statistics	MW1	MW1A	MW2	MW3	MW4	MW5	MW5A	MW6	MW7	MW7BT	MW8	MW9	P1	PZT	EXT1
Number of Readings	6	20	27	24	4	21	8	7	17	15	16	8	15		
Minimum	77.45	74.42	73.64	74.61	71.37	76.75	73.48	73.46	73.67	73.44	75.57	73.53	73.74		
Maximum	78.10	78.02	78.32	77.51	77.31	77.54	77.53	77.62	78.42	77.49	78.73	77.59	78.19		
Max - Min	0.65	3.60	4.44	3.71	5.16	0.56	4.06	4.07	3.95	3.02	4.05	3.16	4.06	4.45	
Mean															
Standard Deviation															
Variance															

**Table 1**  
**Soil Analytical Results Summary**  
**Hilldale Shell / Project #718**  
 (Concentrations are in mg/kg)

**Table 1 (Continued)**  
**Soil Analytical Results Summary**

Sample	Depth (feet)	PID/FID (ppm)	DRO	GRO	Benzene	Toluene	Ethybenzene	Xylenes	MTBE	1,2,4-TMB	1,3,5-TMB	1,2-DCA	Pb	Other VOCs
MW3 S4	6.0-8.0	7	NA	<5.0	<0.0022	<0.0210	<0.0107	<0.0214	0.0809	<0.0107	<0.0107	<0.0054	7.1	NA
MW3 S7	16.0-18.0	53	NA	<5.0	<0.0012	<0.0120	<0.0061	<0.0122	0.544	<0.0061	<0.0031	7.6	NA	
MW5	6-8	0.00	NA	<5.0	<0.0015	0.0828	<0.0072	<0.0072	<0.0144	<0.0072	<0.0072	<0.0036	<5.6	NA
MW5	16-18	0.00	NA	<5.0	<0.0017	<0.0166	<0.0083	<0.0083	<0.0166	<0.0083	<0.0083	<0.0042	8.9	NA
S5	10.0	6*	NA	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S6	9.0	50*	NA	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S9	11.0	8000*	NA	460	<3.0	5.7	8.2	8.1	<3.0	7.9	22	<0.15	NA	n-Butylbenzene tert-Butylbenzene Isopropylbenzene Naphthalene n-Propylbenzene
S12	10.0	80*	NA	<1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S13	10.0	150*	NA	1.6	<0.0054	<0.0054	<0.0054	<0.0164	<0.0054	<0.0054	<0.0054	<0.0054	NA	NA
S14	10.0	16*	NA	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S15	10.0	2*	NA	<1.2	<0.0060	<0.0060	<0.0060	<0.0180	<0.0060	<0.0060	<0.0060	<0.0060	NA	NA
S16	10.0	40*	NA	<1.2	<0.0060	<0.0060	<0.0060	<0.0180	<0.0060	<0.0060	<0.0060	<0.0060	NA	NA
S17	10.0	8*	NA	<1.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S18	10.0	1*	<5.9	NA	<0.0059	<0.0059	<0.0059	<0.0179	<0.0059	<0.0059	<0.0059	<0.0059	ND	ND
S19	10.0	0*	<6.0	NA	<0.0060	<0.0060	<0.0060	<0.0180	<0.0060	<0.0060	<0.0060	<0.0060	NA	ND
Blank 1					<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blank 2					<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
Blank 3					<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
NR 720 Standards				100	0.0055	1.5	2.9	4.1	--	--	--	4.9	50	

**ABBREVIATIONS**

PID = Photo Ionization Detector Readings

GRO = Gasoline Range Organics

DRO = Diesel Range Organics

TMB = Trimethylbenzene

NA = Not analyzed.

**NOTES**

\* FID used for headspace analysis

MW2 was analyzed for volatile organic compounds using EPA Method 8021, for PCB's, cadmium, and DRO. No PCB's or cadmium were detected. Blank samples were collected on May 10-12 (Blank 1), May 27, 1994 (Blank 2), and August 4-5, 1994 (Blank 3).

B = Benzene

T = Toluene

E = Ethylbenzene

MTBE = Methyl tert-butyl ether

-- = None established.

FID = Flame Ionization Detector

X = Total Xylenes

DCA = Dichloropethane

Pb = Total Lead, NR 720 standard listed is for non-industrial sites.

ND = Not Detected

**Table 4**  
**Soil Excavation Analytical Results**  
**Hilldale Shell / Project #718**  
**(Concentrations are in mg/kg)**

Sample	Date	Depth (feet)	Lab Notes	GRO	Benzene	Ethylbenzene	Toluene	Xylenes	1,2,4-TMB	1,3,5-TMB	MTBE	N	Other VOCs
W. Wall	9/22/94	4	(1)	5.7	<0.006	0.004	<0.006	0.020	0.10	0.028	0.078	0.053	Methylene chloride 0.010
S. Wall SW	9/22/94	4	(2)	<1.2	<0.006	0.018	0.019	0.180	0.28	0.080	<0.006	0.068	sec-Butylbenzene 0.005 Isopropylbenzene 0.004 p-Isopropyltoluene 0.004 Methylene chloride 0.019 n-Propylbenzene 0.018
N. Wall NW	9/22/94	5	(3)	<1.2	<0.006	<0.006	<0.006	0.006	0.008	<0.006	<0.006	<0.006	Methylene chloride 0.012
N. Wall	9/22/94	5	(4)	<1.2	<0.006	0.004	<0.006	0.024	0.082	0.021	<0.006	0.19	p-Isopropyltoluene 0.003 Methylene chloride 0.018
S. Wall	9/22/94	4	(5)	2.7	0.004	0.027	<0.006	0.078	0.18	0.062	<0.006	0.035	Isopropylbenzene 0.006 Methylene chloride 0.020 n-Propylbenzene 0.031
E. Wall	9/22/94	4	(6)	<1.2	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	<0.006	<0.006	Methylene chloride 0.010
SE Corner	9/22/94	5	(7)	<1.2	<0.006	<0.006	<0.006	<0.012	<0.006	<0.006	0.020	<0.006	Methylene chloride 0.026
MeOH Blank	9/22/94	--	--	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	
NR 720 Soil Standards				100	0.0055	2.9	1.5	4.1	NE	NE	NE	50	

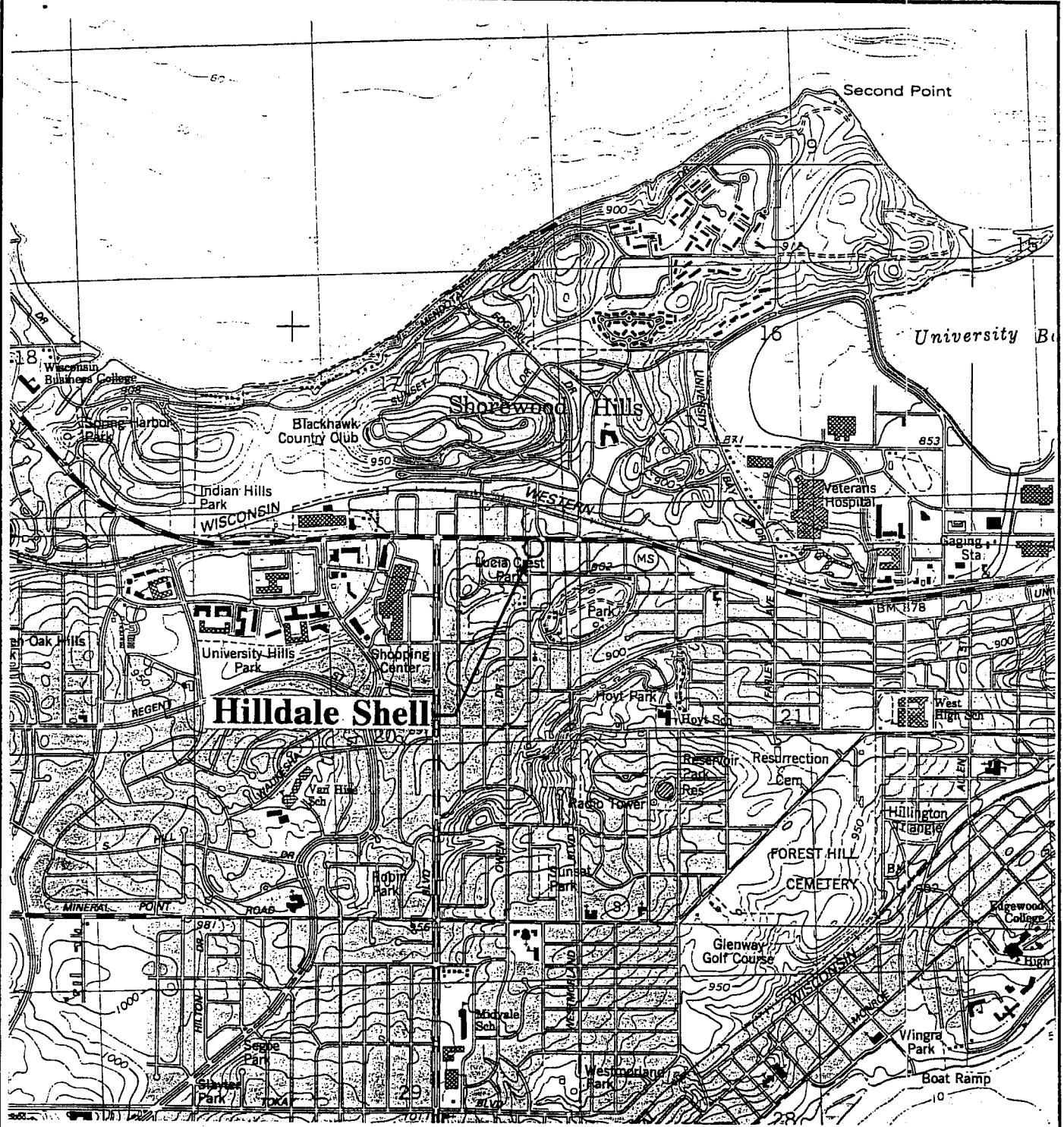
**ABBREVIATIONS:**  
GRO = Gasoline Range Organics  
NA = Not Analyzed

TMB = Trimethylbenzene  
NE = No Standard Established  
MTBE = Methyl-tert-butyl ether  
VOCs= Volatile Organic Compounds

- LABORATORY NOTES:**
- (1) Methylene chloride present in method blank at 0.004 mg/kg. Ethylbenzene and o-Xylene have estimated values, concentrations were less than PQL. GRO sample contains fractions heavier than GRO hydrocarbons.
  - (2) Sec-Butylbenzene, Isopropylbenzene, p-Isopropyltoluene have estimated values, concentrations are less than PQL. Methylene chloride present in method blank at 0.008 mg/kg. 1,2,4-Trimethylbenzene has an estimated value, concentration exceeds instrument calibration range. GRO sample analysis contained a low Internal Standard Response.
  - (3) Methylene Chloride present in method blank at 0.004 mg/kg.
  - (4) GRO sample contains fractions heavier than GRO hydrocarbons. Ethylbenzene and Methylene chloride have estimated values, concentrations were less than PQL. Methylene chloride present in method blank at 0.008 mg/kg.
  - (5) Benzene and o-Xylene has estimated values, concentrations were less than PQL. Methylene chloride present in method blank at 0.008 mg/kg.

- (6) Methylene chloride present in method blank at 0.010 mg/kg. Sample analysis contained a Low Internal Standard Response.
- (7) Methylene chloride present in method blank at 0.008 mg/kg.

l:\718\Tables.wpd



### MADISON WEST, WIS.

SW/4 MADISON 15' QUADRANGLE  
43089-A4-TF-024

1983

UTM GRID AND 1983 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

1°40' 1°  
30 MILS 18 MILS

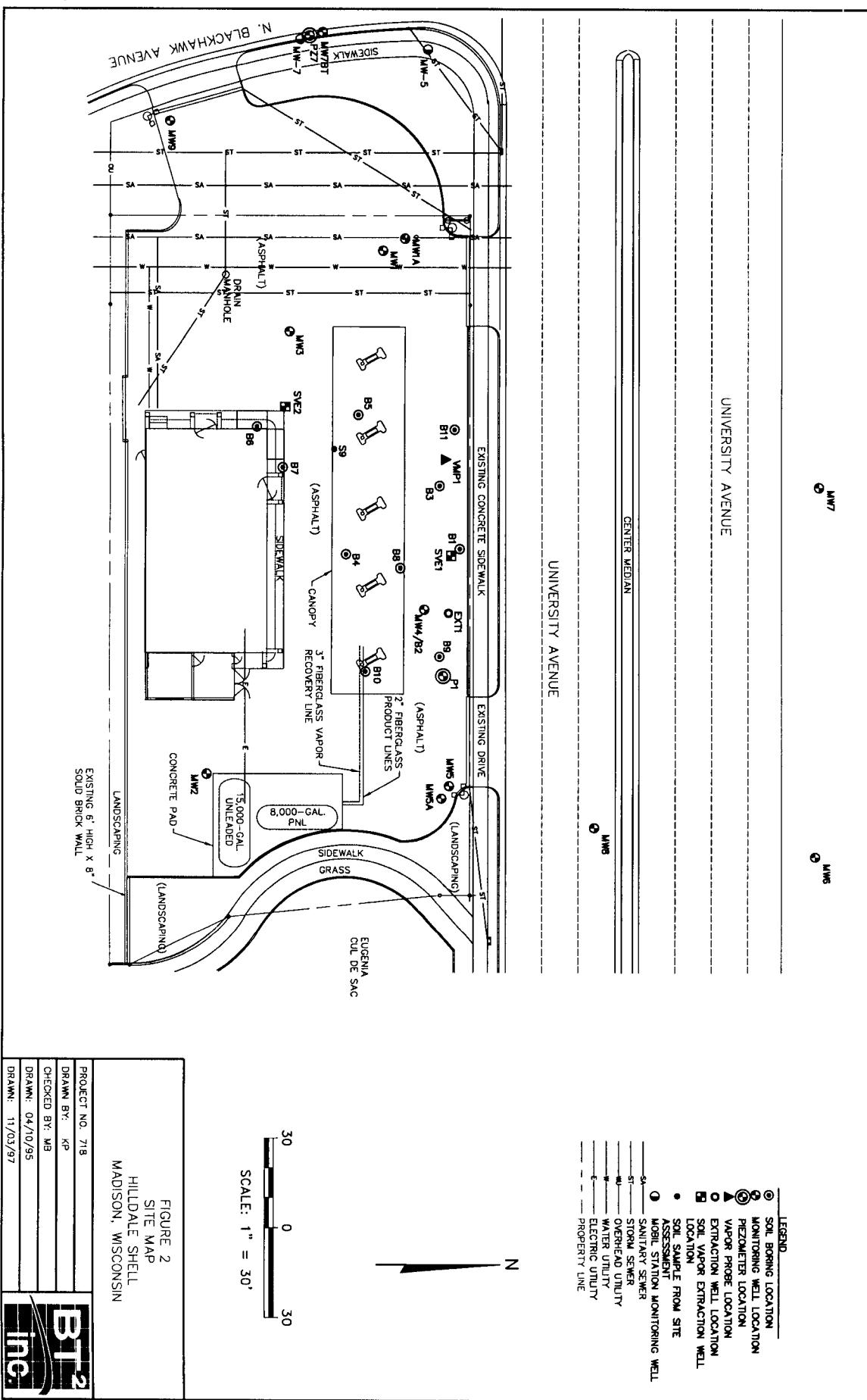
DMA 3170 III SW-SERIES V86!

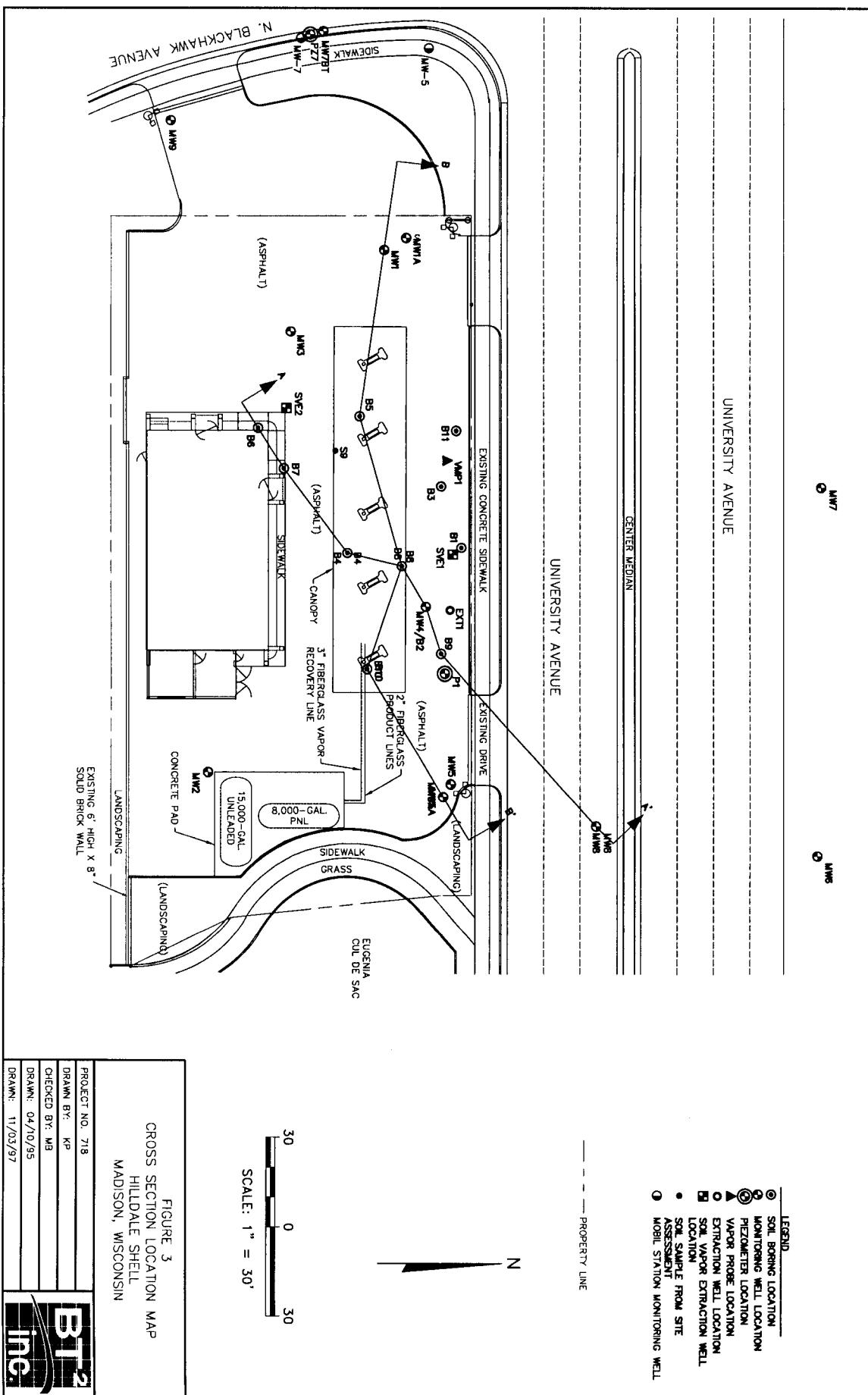


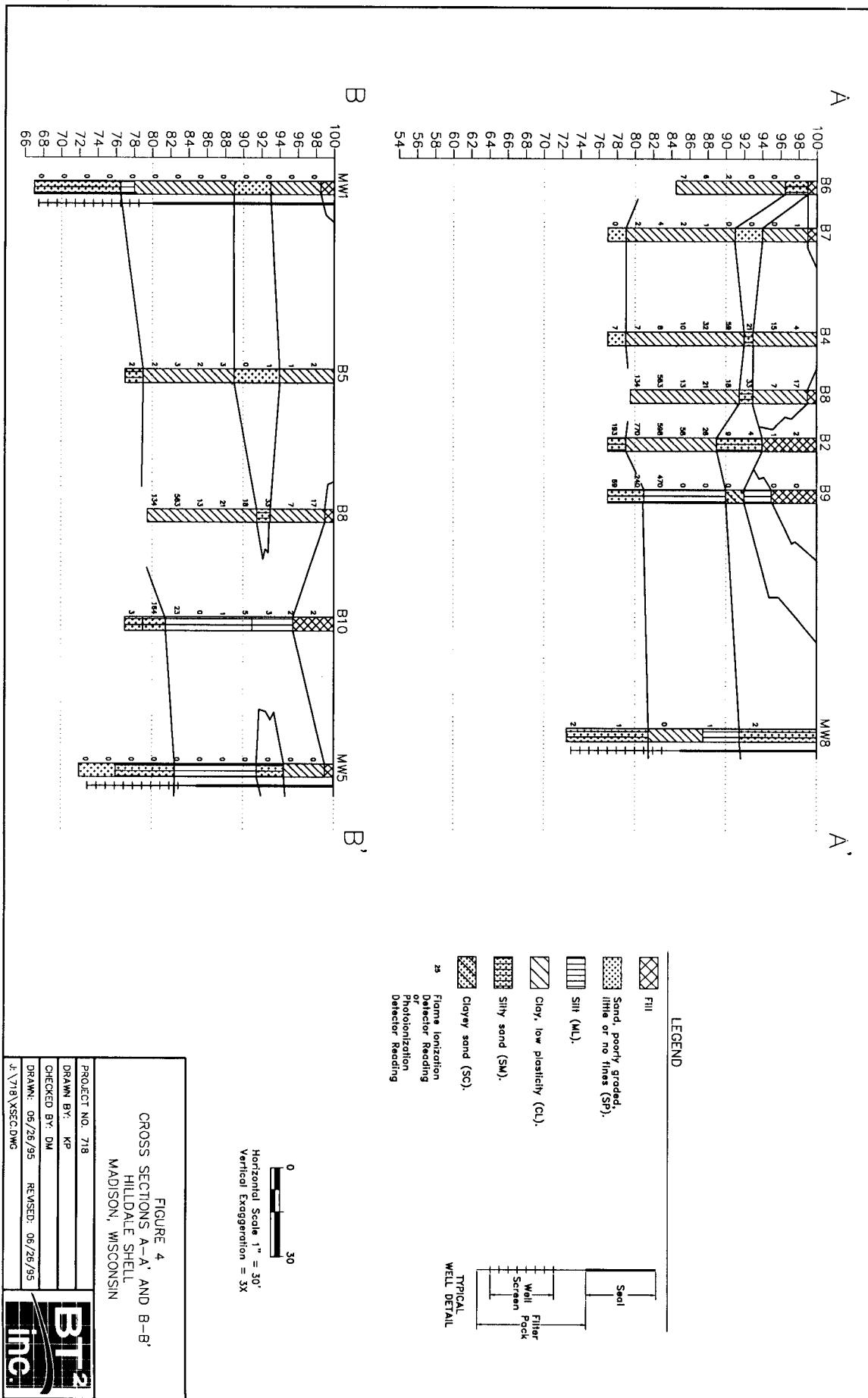
QUADRANGLE LOCATION

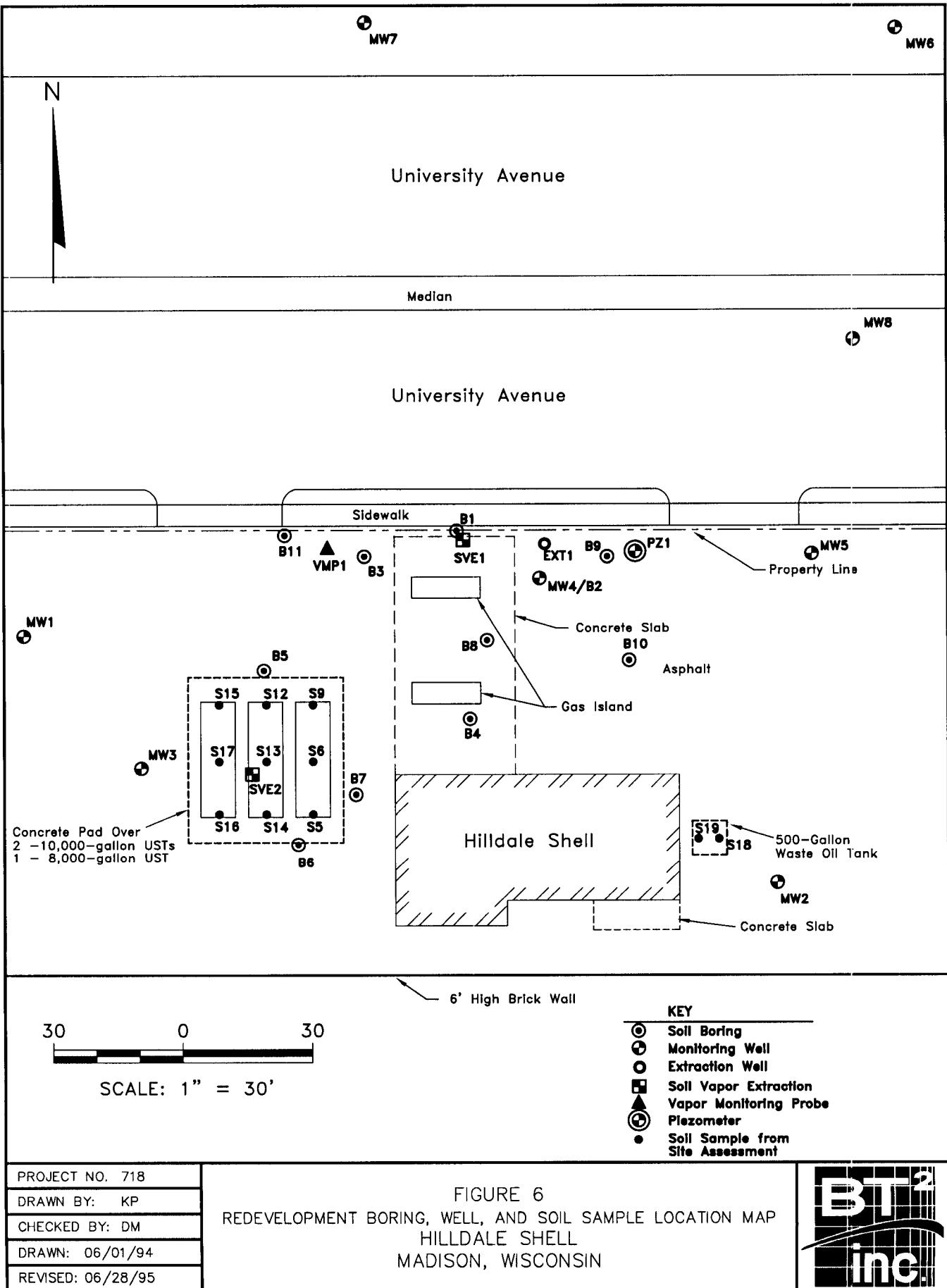
PROJECT NO. 718
DRAWN BY: KP
CHECKED BY: DM
DRAWN: 06/01/94
SCALE: 1" = 2000'

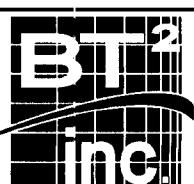
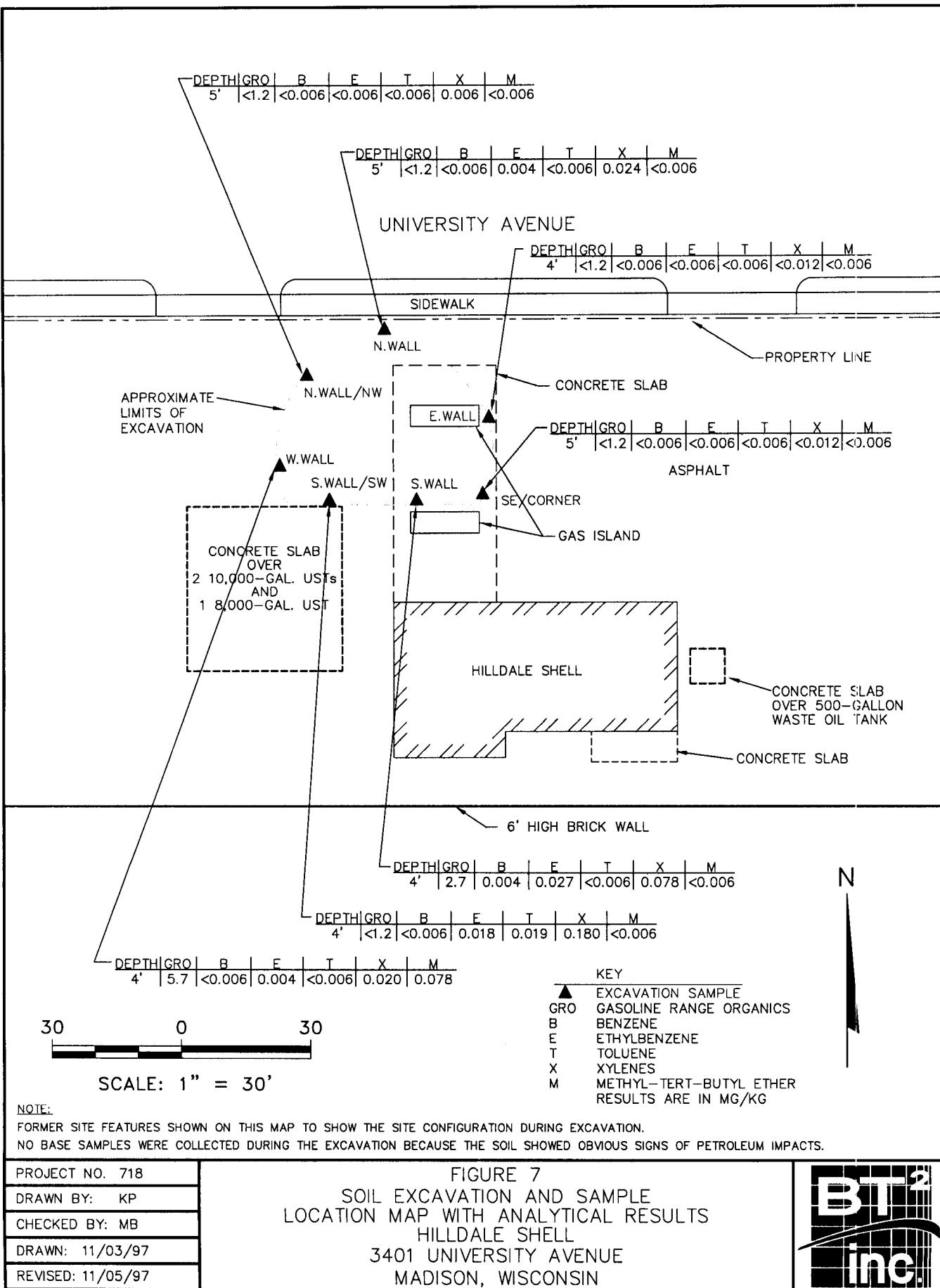
FIGURE 1  
SITE LOCATION MAP  
HILDALE SHELL  
MADISON, WISCONSIN

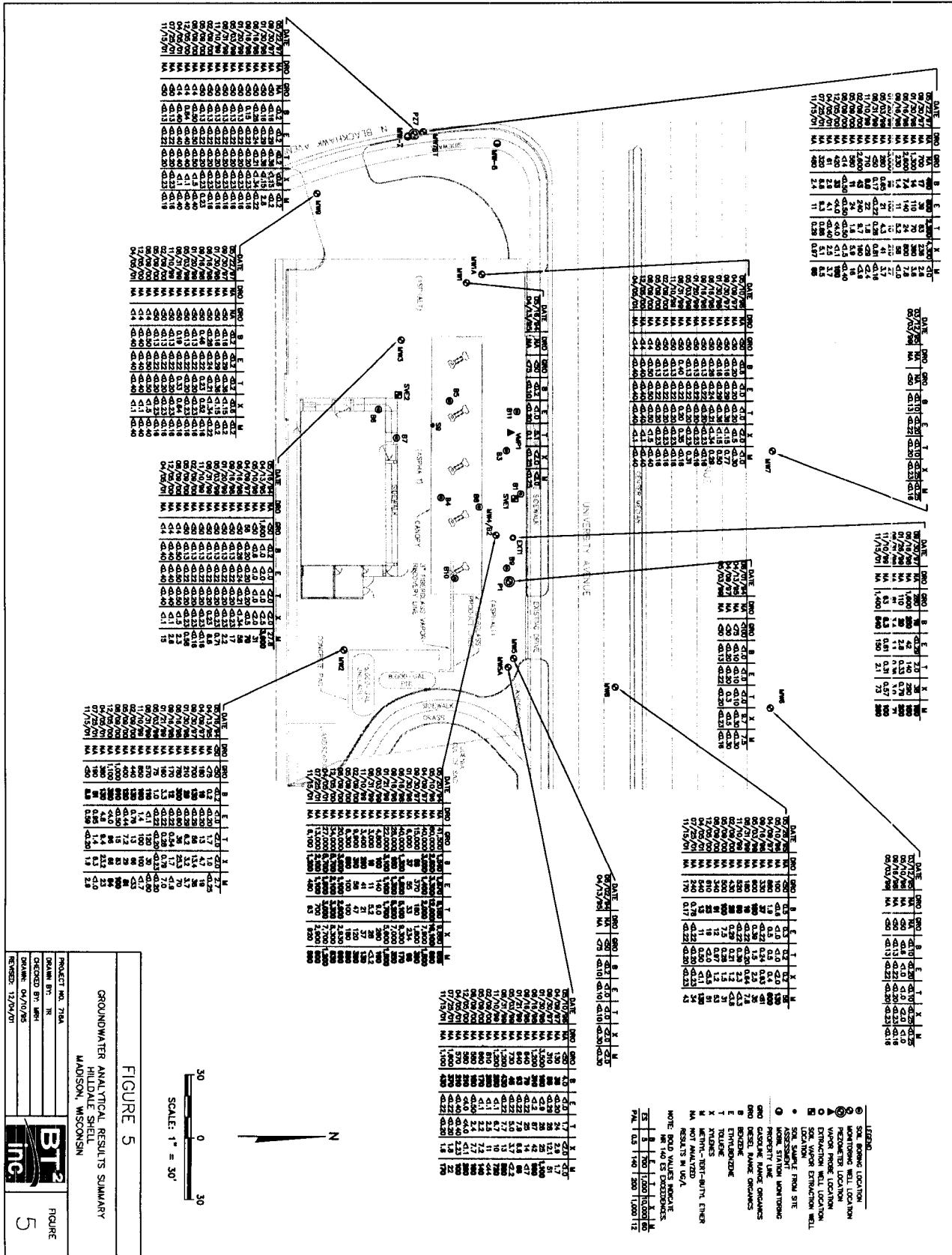


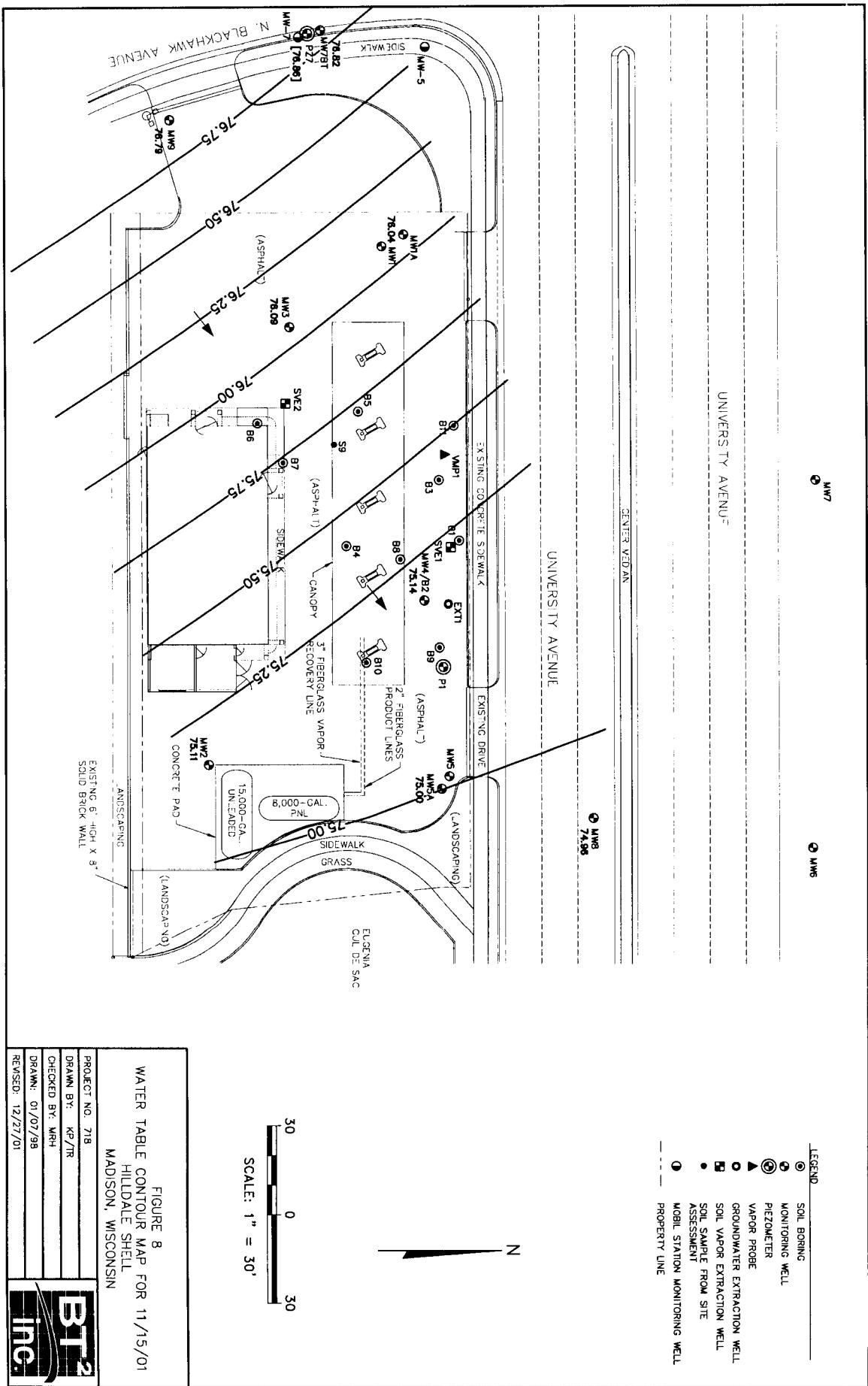














# HILLDALE SHELL FOODMART

3401 University Avenue  
Madison, WI 53705



(608) 238-6166  
(608) 238-1037 (FAX)

March 6, 2002

To: Wisconsin Department of Natural Resources

Subject: Certification that Attached Property Legal Description is Complete and Accurate  
Hilddale Shell  
3401 University Avenue, Madison, WI 53705  
Commerce # 53705-2138-01  
BRRTS # 03-13-002209  
City of Madison Parcel # 251-0709-201-0201-2

Parcel #



To Whom It May Concern:

I hereby certify that the following legal description for the Hilddale Shell property,

"PARCEL A: Lot 6, and part of Lots 1, 2, 3, 4, 5, and 19, Block 6, University Park, City of Madison, Dane County, Wisconsin, being more particularly described as follows; Commencing at the Northeast corner of Section 20, T7N, R9E, City of Madison, Dane County, Wisconsin; thence N 89 degrees 21' 43" W, 469.87 feet; thence S 00 degrees, 23' 13" E, 76.01 feet to the point of beginning; thence continuing S 00 degrees 23' 13" E, 10.15 feet to a point on a curve; thence Southeasterly on a curve to the left which has a radius of 47.0 feet and a chord which bears S 08 degrees, 17' 10" E, 68.77 feet to a point of reverse curve; thence Southeasterly on a curve to the right which has a radius of 40.0 feet and a chord which bears S 27 degrees 50' 48" E, 36.89 feet to a point of tangency; thence S 00 degrees 23' 13" E, 6.47 feet; thence N 89 degrees 21' 43" W, 224.25 feet; thence N 00 degrees 23' 13" W, 117.0 feet; thence S 89 degrees 21' 43" E, 197.78 feet to the point of beginning.

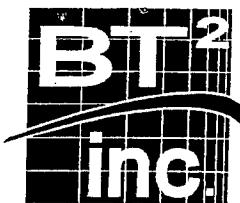
PARCEL B: Part of vacated Blackhawk Avenue, located in the NE ¼ of Section 20, T7N, R9E, City of Madison, Dane County, Wisconsin, being more particularly described as follows: Beginning at the Southwest corner of Lot 6, Block 6, University Park, a recorded plat in said NE ¼; thence N 89 degrees 18' 06" W, 30.00 feet to the centerline of Blackhawk Avenue as originally platted; thence N 00 degrees 12' 20" W, 118.97 feet on said centerline to the South right-of-way line of University Avenue, thence S 89 degrees 21' 42" E, 30.00 feet on said South right-of-way line to a point on the West property line of said Lot 5, said Block 6; thence S 00 degrees 12' 20" E, 119.00 feet on the West line of said Lots 5 and 6 to the point of beginning."

Is complete and accurate for describing all the properties within or partially within the contaminated site's boundaries that have groundwater contamination that exceeds the ch. NR140 enforcement standards at the time that closure was requested. The above property description is indicated (circled) on the copy of the legal description for deeded properties associated with Hilldale Shell (see attached).

Sincerely,

*William Schmied*

William Schmied  
Responsible Party  
Hilldale Shell



April 30, 2002

Mr. Larry Nelson, City Engineer  
City of Madison  
Room 115 CCB  
210 Martin Luther King Jr. Boulevard  
Madison, WI 53710

Mr. Joe DeMorett  
City of Madison  
Room 107A CCB  
210 Martin Luther King Jr. Blvd  
Madison, WI 53710

**SUBJECT: Notification of Residual Soil and Groundwater Impacts in Right-of-Way  
Hilddale Shell – 3401 University Avenue, Madison, Wisconsin 53705  
WDNR File #03-13-002209  
PECFA Claim #53705-2138-01**

Dear Mr. Nelson and Mr. DeMorett:

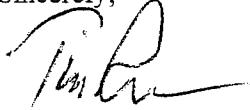
On behalf of Hilddale Shell, BT<sup>2</sup>, Inc., is providing you with notification of residual petroleum impacts to groundwater in the University Avenue and Eugenia Cul de Sac right-of-ways as required for site closure per chapter NR 726.05(2)(b)(4), Wisconsin Administrative Code (WAC). BT<sup>2</sup>, on behalf of Hilddale Shell, is requesting that the Wisconsin Department of Commerce (Commerce) close the Hilddale Shell site by accepting natural attenuation as a final remedy for the remediation of petroleum-impacted groundwater at the site. If the Wisconsin Department of Commerce (Commerce) decides to close the site, the Hilddale Shell property will be added to the WDNR geographical information system (GIS) Registry of Closed Remediation Sites per chapter NR 726(2)(b), WAC.

Groundwater petroleum contamination that appears to have originated on the Hilddale Shell property located at 3401 University Avenue, Madison, Wisconsin has migrated onto the University Avenue and Eugenia Cul de Sac right-of-ways in Madison, Wisconsin. The concentrations of benzene and methyl-tert- butyl ether in groundwater samples from nearby monitoring wells are greater than the state groundwater enforcement standards (ESs) found in chapter NR 140, WAC. However, based on groundwater monitoring conducted at the Hilddale Shell site, the groundwater contaminant plume is stable or receding and will naturally degrade over time. It appears that allowing natural attenuation to complete the cleanup at this site will meet the requirements for case closure that are found in chapter NR 726, WAC. Current groundwater contaminant conditions are summarized in **Table 1** and on **Figure 1**.

Mr. Larry Nelson and  
Mr. Joe DeMorett  
April 30, 2002  
Page 2

If you need more information, you may contact me at (608) 224-2830.

Sincerely,



Tim Ryan, P.E.  
Project Engineer

Enclosures:      Tables 1  
                        Figures 1

cc:      Bill Schmied, Hilddale Shell

I:\718\Closure\020423ROW NOTIFICATION\_ltr.doc